

CLAIMS:

1. A device for generating radiation by means of excimer discharge, equipped with an at least partly UV-transparent discharge vessel (1), the discharge space (2) of which is filled with a gas filling, with means for igniting and maintaining an excimer discharge (4, 5) in the discharge space, and with a coating (3) comprising a light-emitting compound of the

5 following composition:

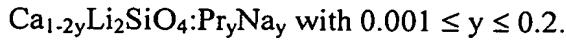


wherein Ln is a cation selected from the group Ce^{3+} , Pr^{3+} , Sm^{3+} , Eu^{3+} , Gd^{3+} , Tb^{3+} , Dy^{3+} , Er^{3+} , Tm^{3+} and Yb^{3+} ,

and M is a cation selected from the group Na^+ , K^+ and Rb^+ , with

10 $0 \leq x \leq 0.1$, $0.001 \leq y \leq 0.2$ and $0 \leq z \leq 1$.

2. A device as claimed in claim 1, characterized in that the coating (3) is equipped with a light-emitting compound of the following composition:



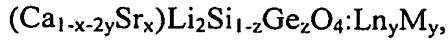
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3. A use of a device as claimed in claim 1 or 2 for disinfection purposes.

4. A use of a device as claimed in claim 1 or 2 for disinfecting water, air, or surfaces.

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5. A light-emitting compound of the following composition:



wherein Ln is a cation selected from the group Ce^{3+} , Pr^{3+} , Sm^{3+} , Eu^{3+} , Gd^{3+} , Tb^{3+} , Dy^{3+} , Er^{3+} , Tm^{3+} and Yb^{3+} ,

25 and M is a cation selected from the group Na^+ , K^+ and Rb^+ , with $0 \leq x \leq 0.1$, $0.001 \leq y \leq 0.2$ and $0 \leq z \leq 1$.

6. A light-emitting compound of the following composition:

